

Key to the figures

R	light rays (comprising R1 to R5)
X-X	optical axis of the lens
5 V-V	axis of vision
1	support
3	light source(s)
5	eye(s)
7	deflection means
10 9	specific zone of 11
11	retina of 5
12	spectacle frame
13	spectacle lens(es) or similar element(s)
15	condenser
15 17	one-piece assembly of condensers 15
19	diffractive lens
20	pupil of 5
21	fovea of 5
23	actual image of the light source

CLAIMS

1. Phototherapy method, acting on the eyes (5) of an individual through light rays (R) of at least one specific wavelength, emitted by at least one light source (3) which is stationary relative to his head, characterised in that it consists:
 - in arranging the light source (3) at the periphery of the field of vision so as to allow the usual activities of the individual, and
 - in deflecting said light rays (R) onto a specific zone (9) of the retina (11) so as to maintain vision.
2. Method according to Claim 1, characterised in that said limited zone (9) which receives the deflected rays is selected in such a way as to exclude the fovea (21) regardless of the direction of vision below a plane passing through the optical axis (X-X) of lenses (19) arranged so as to deflect the light rays (R) towards this limited zone (9).
3. Method according to either of Claims 1 and 2, characterised in that the deflected light rays (R) are made to converge in the eye (5) at a point (23) located slightly behind the pupil (20) of the eye.
4. Method according to any one of Claims 1 to 3, characterised in that the light rays (R) are deflected by diffraction.
- 25 5. Method according to any one of Claims 1 to 3, characterised in that the light rays (R) are deflected by refraction.
6. Device for implementing the phototherapy method according to any one of Claims 1 to 5, characterised in that it comprises:
 - a support (1) designed to be immobilised on the head,
 - the light source(s) (3) mounted on the support (1) at the periphery of the field of vision, emitting light rays (R) of at least one specific wavelength and being arranged so that the latter are directed into the eyes (5), by deflection means (7), onto said specific zone (9).

7. Device according to Claim 6, characterised in that said support (1) consists of a spectacle frame (12), said deflection means (7) being in the form of spectacle lenses (13).
- 5 8. Device according to Claim 6, characterised in that the support (1) consists on the one hand of a spectacle frame (12) with corrective lenses and on the other hand of a spectacle attachment, said deflection means (7) being in the form of lenses of said attachment, the light source(s) (3) being mounted on this attachment.
- 10 9. Device according to any one of Claims 6 to 8, characterised in that it comprises, for each eye (5), one or more light sources (3), such as light-emitting diodes, and separate deflection means (7) which are arranged so as to cooperate with the light source(s) (3) of each eye (5).
- 15 10. Device according to Claim 9, characterised in that it comprises, preferably separately for each light source (3), a condenser (15)
- which is arranged so as to direct the light rays (R) emitted by each of the sources (3) onto said deflection means (7), and
20 - which is associated with the light source (3) at the periphery of the field of vision.
11. Device according to any one of Claims 6 to 10, characterised in that the deflection means (7) consist of a ridged refractive lens for each eye (5).
- 25 12. Device according to any one of Claims 6 to 10, characterised in that the deflection means (7) consist of a diffractive lens (19), such as an off-axis diffractive optical element, for each eye (5).
- 30 13. Device according to Claim 12, characterised in that the condenser (15) for the light rays (R) is arranged so as to direct said rays (R) onto the face of the corresponding lens (19) at an angle of incidence, with respect to the optical axis (X-X) of this lens (19), provided such that the distance separating the latter from the eye (5) is such that the actual image (23) of

the light source is located in the eye (5), slightly behind the pupil (20) thereof.

14. Device according to either of Claims 12 and 13, characterised in
5 that an F number of the diffractive lens (19) of around 0.7 is selected.